

The ARCAM logo consists of the word "ARCAM" in a bold, white, sans-serif font, centered within a solid black rectangular box.

ARCAM

ALPHA 5 FM TUNER
HANDBOOK

TECHNICAL SPECIFICATION

ALPHA 5 FM TUNER

FM tuning range	87.5 to 108.0MHz
Tuning system	Phase-locked-loop
Frequency step	50kHz
Presets	16
Sensitivity (IHF)	typically 1.4 μ V
Alternate channel selectivity	better than 60dB
AM suppression ratio	better than 50dB
Capture ratio	typically 1.5dB
Signal Strength meter	5 segment LED
sensitivity	typically 2 μ V to 2mV
Frequency response	20Hz - 12kHz +/- 0.5dB typically -2dB at 15kHz
Ultimate S/N ratio (CCIR) Mono	better than 75dB
Stereo	better than 72dB
Total harmonic distortion 96MHz reference, 22.5kHz deviation at 1kHz	
Mono	better than 0.10%
Stereo	better than 0.30% (using MPX filter)
Channel separation (1kHz)	better than 40dB
Pilot tone suppression	better than 50dB
Output impedance	2kohm
Minimum recommended load	20kohm
Output level	850mV at 75kHz deviation
Power consumption	6VA
Size W/D/H mm.	430 x 230 x 84
Weight	2.2kg nett. 3.2kg packed.
Supplied accessories	FM dipole aerial phono-phono cable co-ax plug adaptor mains lead

E & O E.

INSTALLATION

- ① Check that your mains supply voltage agrees with the voltage setting on the rear panel of the unit.
- If your mains supply voltage is different, consult your Arcam dealer.

MAINS SAFETY

- This product is normally supplied with a moulded mains plug already fitted to the lead. If for any reason the plug needs to be removed, **it must be disposed of immediately and securely**, as it is a potential shock hazard when inserted into a mains socket.
- If the plug is removed then the remaining lead must be rewired as follows:
- The **blue** wire must be connected to the terminal which is coloured **blue** or marked with the letter **N**.
- The **brown** wire must be connected to the terminal which is coloured **brown** or marked with the letter **L**.
- The **green and yellow** wire must be connected to the terminal which is coloured **green and yellow**, or marked with the letter **E** or the safety earth symbol.
- When replacing the fuse in the supplied moulded mains plug, the integral fuse holder/cover must always be refitted.
- **Warning**, this apparatus must be earthed.

MAINS SUPPLY CONNECTIC

- ② Insert the IEC line socket of lead fully into the power in rear panel. Connect the other end of the lead to your mains supply.

AUDIO CONNECTIONS

- ③,④ **AUDIO OUTPUTS** - Both are identical. Connect one to your amplifier's TUNER input and the other a suitable interconnect cable. The VCR's audio input for simultaneous broadcasts (similar to a cassette deck for direct recording). Insert the red phono plug into the socket labelled 'R' and the black phono plug into the socket labelled 'L'.

AERIAL CONNECTIONS

- ⑤ **AERIAL SOCKET** - Connect your aerial downlead using the supplied adaptor if necessary.

OPERATION

- ⑥ **MONO** - Selects mono output. The led (light emitting diode) will glow red when mono is selected. If a weak station is received, the background hiss can be reduced by selecting mono.
- ⑦ **AUTO** - Selects automatic tuning. The led will glow green when AUTO is selected. If the led is not lit manual tuning is selected.

- ③, ⑨ ▽ ▲ - Press to tune up or down through the FM frequency band. In AUTO tuning mode the frequency display will stop automatically at a station with a suitably strong signal. In manual tuning mode press and hold ▽ or ▲ until the desired frequency is displayed.
- ⑩ STORE - For storing up to 16 FM stations into the preset memory. To preset stations press STORE and while the led glows red, press the desired preset button.
- ⑪ SHIFT - When storing preset stations 9-16, press STORE, press and **hold** SHIFT, then press the desired preset button.
- ⑫ PRESET BUTTONS - Once all the stations have been preset into the memory, simply press the relevant button to select the desired stations. Use SHIFT when selecting preset stations 9-16.
- ⑬ POWER - Switches the unit on and off.
- ⑭ SIGNAL STRENGTH METER - Indicates signal strength of the selected station. As several radio stations are available on more than one frequency, use the signal strength meter to help you locate the best position for each station.
- As a guide, two red leds will give good mono reception. Two red leds and two green leds will give adequate stereo reception. All five leds will give the best stereo reception with the least possible background noise. In most cases, you will need to use a roof mounted aerial connected to the tuner with a good quality low loss 75ohm co-axial cable to achieve the best results. The simple wire dipole aerial provided is only suitable for reception of strong local stations.
- ⑮ STEREO LED - Indicates stereo reception. When tuning through the FM frequency band in stereo (auto or manual) inter-station noise and very weak signals are automatically muted. To cancel muting, select mono output (see ⑥ MONO).
- ⑯ FM FREQUENCY DISPLAY - Indicates the frequency of the selected FM station.
- PRESET MEMORY BACK-UP - The preset memory will be retained while the tuner is connected to the mains. If the mains supply is disconnected, the memory will be retained for approximately one week.

RADIO INTERFERENCE

- The Alpha 5 tuner is a digital audio device which has been designed to very high standards of electromagnetic compatibility.
- **EC COUNTRIES:** This product has been designed to comply with directive 89/336/EEC.

SAFETY STANDARD

- This product has been designed to meet the IEC 65 international electrical safety standard.

FOR YOUR INFORMATION

The BBC publishes a booklet entitled "Radio Transmitting Stations" which contains details of all BBC transmitters in the UK together with other useful hints and tips.

This booklet can be obtained on request by sending a large stamped addressed envelope to:-

BBC Engineering Information,
White City,
201 Wood Lane,
London,
W12 7TS.

Telephone: 0345 010313
(local call rate)

The Radio Authority publishes a booklet which contains details of all independent radio stations. This booklet can be obtained on request by sending a large stamped addressed envelope to:-

Radio Authority,
Holbrook House,
14 Great Queen Street,
London,
WC2B 5DG.

Telephone: 071 430 2724